

REMARKS

In response to the above-identified Office Action, Applicant seeks reconsideration of the application. In this response, no claims have been canceled, Claims 26 and 27 have been added, and Claims 1, 8, 15 and 19 have been amended. Accordingly, Claims 1-27 are pending.

I. 35 U.S.C. § 102(e)

Claims 1-3, 5-10, 12-16, 18-21 and 23-25 are rejected under 35 U.S.C. § 102(e) as being unpatentable by Rusu et al. (U.S. Patent Application 2003/0065960). Applicant respectfully traverses this rejection.

Applicant notes that, to anticipate a claim, every element of the claim must be disclosed within a single reference. Thus, if even one feature of the amended Claim 1 is not found in Rusu, Applicant respectfully requests that the rejection of Claim 1 under 35 U.S.C. §102(e) as being anticipated by Rusu be withdrawn.

Claim 1 has been amended to require that the claimed thermal control subsystem is in communication with at least one counter and the thermal control subsystem estimates the amount of power used by the microprocessor based on information provided by the at least one counter. Amended Claim 15 recites a thermal control system comprising: a power usage estimator coupled to at least one counter, the power usage estimator to estimate an amount of power used by a microprocessor based on information provided by the at least one counter; and a throttling control unit to control at least one throttling mechanism incorporated in the microprocessor based on the estimated amount of power used by the microprocessor.

Rusu discloses a processor that has the capability to control its own voltage and frequency operating points through an on-die power sensor 106 that measures the amount of current being consumed by processor and a controller 108 that computes the power being dissipated by the processor based on the measured current consumption. However, Rusu does not teach a thermal control subsystem that is in communication with at least one counter and estimates the amount of power used by the microprocessor based on information provided by the at least one counter, as recited in Claim 1. Additionally, there is nothing in Rusu that teaches a power usage estimator that is in communication with at least one counter and estimates an amount of power used by a microprocessor based on information provided by the at least one counter, as recited in Claim 15.

Claim 8, as amended, recites a method comprising: [1] receiving information provided by at least one counter; [2] estimating an amount of power used by a microprocessor based on the information provided by the at least one counter; and [3] controlling at least one throttling mechanism incorporated in the microprocessor based on the estimated power usage. Similarly, amended Claim 19 recites a machine-readable medium that provides instructions, which when executed by a microprocessor cause said microprocessor to perform operations comprising: [1] receiving information provided by at least one counter; [2] estimating an amount of power used by a microprocessor based on the information provided by the at least one counter; and [3] controlling at least one throttling mechanism incorporated in the microprocessor based on said estimated power usage.

Rusu does not disclose a method comprising [1] receiving information provided by at least one counter and [2] estimating an amount of power used by a microprocessor based on the information provided by the at least one counter, as recited in Claims 8 and 19. Instead, as noted above, Rusu discloses a processor that has the capability to control its own voltage and frequency operating points through an on-die power sensor 106 that measures the amount of current being consumed by processor and a controller 108 that computes the power being dissipated by the processor based on the measured current consumption.

In view of the foregoing, Applicant respectfully submits that Claims 1, 8, 15 and 19 are not anticipated by Rusu and requests withdrawal of this rejection. Dependent Claims 2, 3, 5-7, 9, 10, 12-14, 16, 18, 20, 21 and 23-25 are submitted as not being anticipated by Rusu at least for the reasons given in support of their base Claims 1, 8, 15 and 19.

II. 35 U.S.C. § 103(a)

Claims 4, 11, 17 and 22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Rusu et al. (U.S. Patent Application 2003/0065960) in view of Kenny et al. (U.S. Patent No. 5,287,292). Applicant respectfully traverses this rejection.

Applicant respectfully submits that Rusu qualifies as prior art only under one or more of subsections (e), (f) and (g) of 35 U.S.C. §102 and the subject matter described in Rusu and the subject matter of all pending claims were, at the time the invention was made, owned by the same entity or subject to an obligation of assignment to the same entity, Intel Corporation.

Accordingly, pursuant to 35 U.S.C. § 103(c), Rusu is not a suitable 103(a) reference and does not preclude patentability of Claims 4, 11, 17 and 22 under 35 U.S.C. §103(a).

Since Rusu is cited as a reference in rejecting the claims, Applicant respectfully requests that the Examiner withdraw the rejection of Claims 4, 11, 17 and 22 under 35 U.S.C. § 103(a).

III. New Claims

Applicant respectfully submits that New Claims 26 and 27 are supported by the original disclosure. As to New Claims 26 and 27, Applicant incorporates the prior arguments with respect to their base Claim 1. At least for this reason, Applicant is of the opinion that New Claims 26 and 27 are allowable.

CONCLUSION

In view of the foregoing, it is believed that all claims now pending patentably define the subject invention over the prior art of record and are in condition for allowance, and such action is earnestly solicited at the earliest possible date.

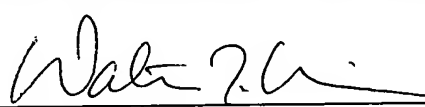
If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2666 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17, particularly, extension of time fees.

If a telephone interview would expedite the prosecution of this Application, the Examiner is invited to contact the undersigned at (310) 207-3800.

Respectfully submitted,

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Marilyn Bass

May 14, 2003